The Canadian Entomologist.

VOL. XVI. LONDON, ONT., MARCH, 1884. No. 3

TWO NEW MYRMECOPHILÆ FROM THE UNITED STATES.

BY LAWRENCE BRUNER, WEST POINT, NEBRASKA.

Before describing these interesting little crickets which have been neglected or overlooked so long in this country, it becomes necessary to enter somewhat into details. The group being one not often written upon, or the specimens often met with, they are therefore rare to collections. Prior to this account but two authentic notices of their capture in the United States have appeared, viz., the one referring to a specimen taken in Georgia by H. K. Morrison, and the other a reference to the present described species, one from the vicinity of Washington, D. C., and the other from the Pacific coast, at Portland, Oregon, the former of which is herewith figured (fig. 4), *a* representing the female, and *b* the male. This is undoubtedly the largest *Myrmecophila* known, being fully 4 m. m. in length, while the largest European species measures nearly one fourth less.

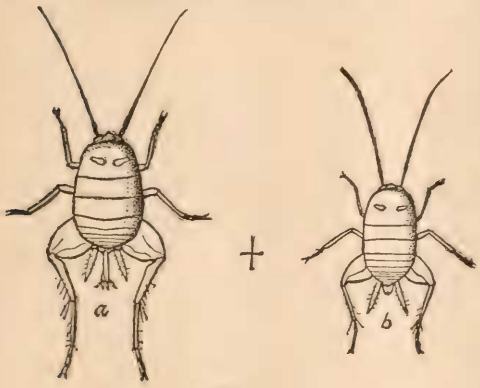

Fig. 4.

The habits of our two species, as far as known, agree well with those of the Orient. They are to be met with in the nests of various species of ants, and especially such as live in rotten stumps and logs or under stones in damp localities. Among these may be mentioned *Camponotus pennsylvanicus*, *Formica rufa*, and *Cremastogater lineolata*.

This being the first description of insects in this country belonging to the genus *Myrmecophila*, it would not be out of place here to give a short diagnosis of the genus before proceeding to the species.

Generic Characters of *Myrmecophila* :—

Body ovate, greatly convex, apterous. Occiput entirely hidden by the pronotum, vertex depressed. Eyes ocelliform. Furrows of the antennæ greatly impressed. Antennæ as long as the body, thickest at base, apex pointed. Pronotum large, wide, narrow in front, wide behind with the front and hind margins usually straight, lobes deflexed but not contracted. Meso- and meta-notum not differing from the segments of the abdomen except in some instances where they are wider. Anterior feet small, subcompressed. Anterior tibiæ without tympanæ, unarmed. Posterior femoræ greatly enlarged, dilate ovoid. Posterior tibiæ shorter than femoræ, stout, compressed, with the upper margin ciliate, internal margin with four movable spines, external margin with two spines, and with four long, terminal spurs. Abdomen short, greatly depressed, and attenuate or tapering. Cerci strong, as long as or longer than the abdomen. Ovipositor short and quite stout. The male differs from the female in its more slender form and its smaller size.

Myrmecophila Pergandei, n. sp.

General form looking from above oval, smallest at the head. The latter depressed, deeply sunken into the front margin of the pronotum. Basal joint of the antennæ very large and globular, with a few short bristle-like hairs encircling the insertion of the second joint, remaining joints gradually decreasing in size toward the apex. Antennæ as long as body, pale yellowish at base, remaining portion rufous. Eyes small, black, composed of a group of ocelli-like cells, which are situated immediately behind the base of the antennæ—in dried specimens partly concealed by the front margin of pronotum. Anterior legs small, slightly compressed, unarmed. Posterior femora greatly enlarged, compressed, ovate incrassate ; tibiæ stout, also slightly compressed, shorter than femora, and furnished with four movable spines on the inner and two on the outer edge ; apex with four long spurs. Tarsi plain. Cerci stout, acuminate, slightly thickest in middle, as long as the abdomen, quite hairy ; a trifle heaviest in the male. Ovipositor slender and larger than usual, with the valves of equal lengths, as shown in the accompanying illustration (Fig. 4, *a*).

Pronotum large, wide and greatly deflexed ; narrow in front and wide behind ; front and hind edges straight. Meso- and meta-notum equal, much larger than first abdominal segment. Color, ochraceous and piceous. Front margin of pronotum and hind margins of thoracic and

abdominal segments, with apex of ovipositor, piceous brown. The characteristic feature of the species is, however, the two light colored elliptical markings upon the disc of the pronotum, as shown in the figure.

♀ 4 m. m. and ♂ 3.85 m. m. in length.

Habitat. Atlantic States, from Maryland southward.

MYRMECOPHILA OREGONENSIS, n. sp.

Elongate oval, body somewhat contracted at its junction with the pronotum, which latter is slightly narrowed at its posterior edge, making its sides appear bulging. It is a more slender species than the preceding, the female of this insect being very similar to the male of that species. Pronotum small, with the sides rounded, posterior edge very slightly arcuate; meso-, meta-notum and first abdominal segments equal. Cerci or anal stylets comparatively slender, 1.2 m. m. in length. Ovipositor 1.5 m. m. in length, medium stout, with the external sheaths slightly longest and pointed, with the points directed outward; internal ones acuminate. Color piceous brown above, with the under side and base of segments lighter. Antennæ concolorous. Disc of pronotum also light colored, but without the two elliptical spots, which are present in *M. Pergandei.*

Female 3.90 m. m. in length, male unknown.

One mature female and a pupa of this last species were collected at Portland, Oregon, in the summer of 1882, by Mr. Samuel Henshaw, of Boston, Mass. The types are deposited in the Museum of Comp. Anat., Cambridge, Mass.

OBITUARY NOTICE.

Mr. Anson Allen died at his home in Orono, Feb. 8, 1884, in the 55th year of his age. He was, without doubt, one of the best collectors, and one of the most careful, accurate and acute observers of insects, their habits and transformations, that we had among us. For a number of years past he spent nearly all the time he could spare from his business in collecting, breeding and exchanging Lepidoptera, and many collections, both in this country and Europe, have been enriched by additions from his exquisite preparations.

Mr. Allen would never save an insect unless it was absolutely perfect, except such as were very rare. For several years he bred from the eggs,